

6-Month Climate Model Forecast Summary for Pennsylvania

January 1, 2018

Climate models continue to improve and may have some skill in forecasting patterns of temperature and precipitation anomalies several months in advance. However, climate modeling is still a very inexact science. Lacking highly precise observations from the earth's environment (air, land and sea) and a full understanding of the scientific processes that affect the motions in the atmosphere, it is impossible to make precise seasonal-scale weather predictions with any accuracy. Please keep this in mind as you review this forecast.

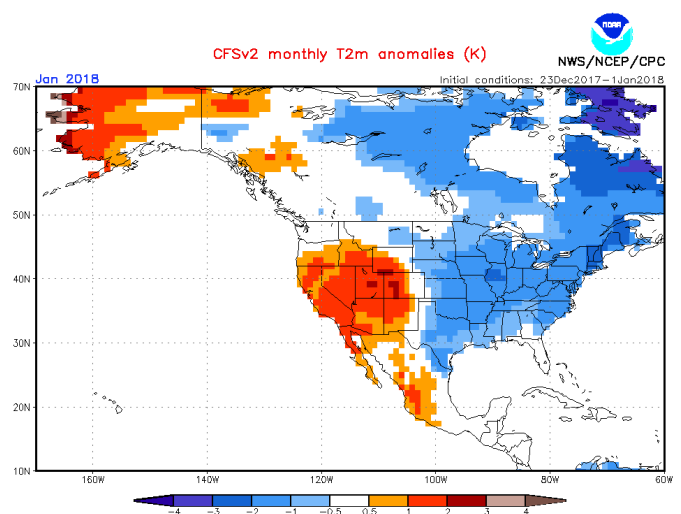
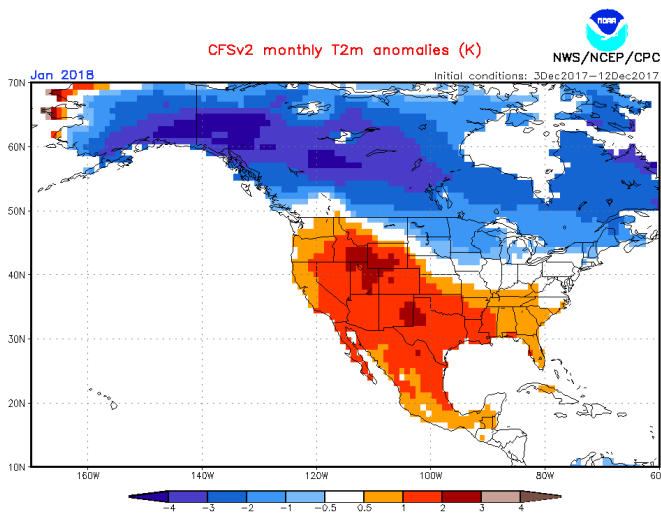
The following forecast is produced based on analysis of monthly forecast products from the Climate Forecast System Version 2 (CFS) and the North American Multi-Model Ensemble (NMME). Links to forecasts are provided at the end of this document.

Discussion:

January continues to be a difficult month to predict. Recent trends in the CFS indicate below normal temperatures and below normal precipitation due to a continuation of the December pattern of northwesterly outbreaks of cold air:

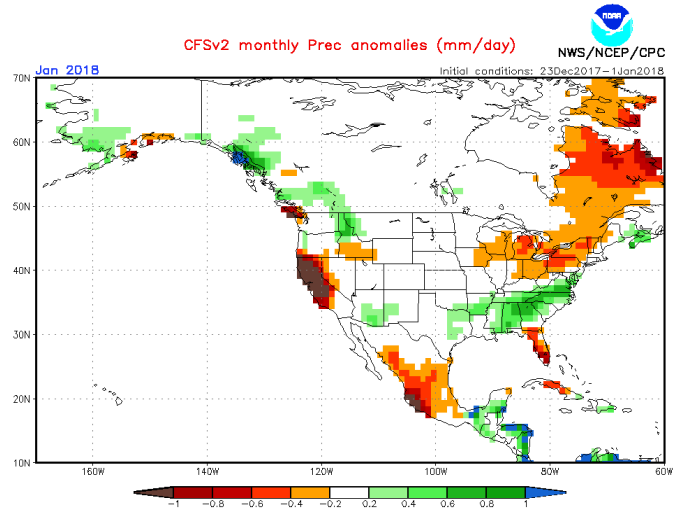
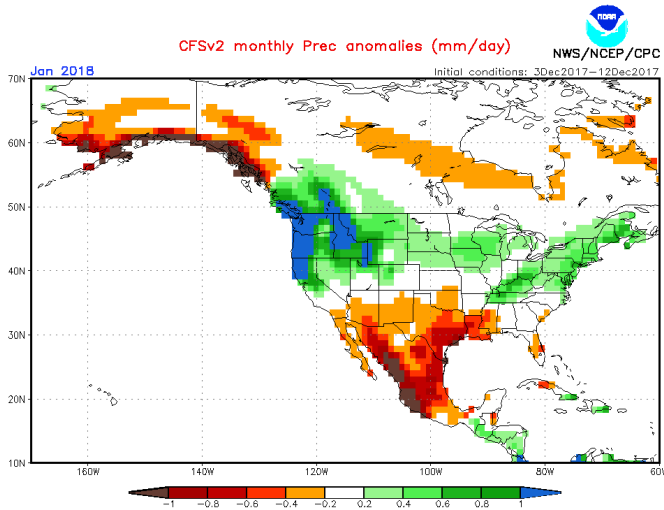
OLD

NEW



OLD

NEW



There is no change in the February forecast, but March is looking less wet than previously. April precipitation has achieved some consensus with a near normal forecast, and the May and June forecasts remain unchanged.

Forecast:

Changes highlighted in yellow
Previous forecast in parentheses

Month	Temperature	Precipitation
January	B(U)	U(A)
February	A(A)	A(A)
March	A(A)	N(A)
April	N(N)	N(U)
May	N(N)	N (N)
June	A(A)	U(U)

BB = Much Below Normal
B = Below Normal
N = Near Normal
A = Above Normal
AA = Much Above Normal
U = Uncertain

The next forecast will be issued on January 15, 2018.

REFERENCES:

CFSv2 Forecasts:

<http://www.cpc.ncep.noaa.gov/products/CFSv2/htmls/glbT2me1Mon.html>

CFS Monthly Forecasts:

http://climate.met.psu.edu/CFS/monthly_by_day.php

NMME Forecasts

<http://www.cpc.ncep.noaa.gov/products/NMME/monanom.shtml>